REMARKS

Reconsideration of the application identified in caption, pursuant to and consistent with 37 C.F.R. §1.111 and in light of the remarks which follow, is respectfully requested.

At the outset, Applicants note that claim 58 has not been examined in the Official Action. Consideration and examination of claim 58 is respectfully requested.

In addition, consideration of the Second Information Disclosure Statement filed on February 22, 2011, and issuance of an Examiner-initialed form PTO-1449, are respectfully requested.

In the Official Action, claims 29-35, 37, 39-41, 43-52 and 55-57 stand rejected under 35 U.S.C. §103(a) as being obvious over International Publication No. WO 03/029350 (*WO '350*). The Examiner has relied on U.S. Patent No. 7,323,241 (*Myard et al*) as being an equivalent of *WO '350*. Withdrawal of this rejection is respectfully requested for at least the following reasons.

Independent claim 29 recites a precursor article of a composite material comprising a polymeric matrix and at least one reinforcing yarn and/or fibers, said precursor article comprising at least one reinforcing yarn and/or fibers and at least one polymeric-matrix yarn and/or fibers, wherein: said reinforcing yarn and/or fibers are made at least in part of reinforcing material; said polymeric-matrix yarn and/or fibers are made of a thermoplastic polymer, said thermoplastic polymer of said reinforcing yarn and/or fibers and/or of said polymeric-matrix yarn and/or fibers comprises at least one polycondensate consisting of: 30 to 100 mol%, limits inclusive, of macromolecular chains satisfying the following formula (I):

$$R_3\text{-}(X\text{-}R_2\text{-}Y)_n\text{-}X\text{-}A\text{-}R_1\text{-}A\text{-}X\text{-}(Y\text{-}R_2\text{-}X)_m\text{-}R_3 \quad (I)$$

0 to 70 mol%, limits inclusive, of macromolecular chains satisfying the following formula (II):

$$R_4\text{-}[Y\text{-}R_2\text{-}X]_p\text{-}R_3 \quad (II)$$

in which chains: -X-, -Y- is a radical obtained from the condensation of two reactive functional groups F_1 and F_2 such that: F_1 is the precursor of the -X- radical and F_2 is the precursor of the -Y- radical, or vice versa, the functional groups F_1 cannot react together by condensation and the functional groups F_2 cannot react together by condensation; A is a covalent bond or an aliphatic hydrocarbon radical that may comprise heteroatoms and contains 1 to 20 carbon atoms; R_2 is a branched or unbranched, aliphatic or aromatic hydrocarbon radical containing 2 to 20 carbon atoms; R_3, R_4 represents hydrogen, a hydroxyl radical or a hydrocarbon radical; R_1 is a linear or cyclic, aromatic or aliphatic, hydrocarbon radical containing at least 2 carbon atoms and optionally including heteroatoms; and n, m and p each represent a number between 30 and 200, wherein the polycondensate is obtained by melt blending a polyamide obtained by polymerization of lactams and/or amino acids or a polyester obtained by polymerization of lactones and/or hydroxyacids, with a difunctional compound, wherein the difunctional compound comprises at least one of adipic acid, decanoic or sebacic acid, dodecanoic acid, terephthalic acid, isophthalic acid, hexamethylenediamine, methylpentamethylenediamine, 4,4'-diaminodicyclohexylmethane, butanediamine, metaxylylenediamine, 1,3-propanediol, 1,2- ethanediol, 1,4-butanediol, 1,5-pentanediol, 1,6-hexanediol or polytetrahydrofuran.

Myard et al does not disclose or suggest each feature recited in independent claim 29. For example, *Myard et al* does not disclose or suggest at least one polycondensate consisting of: 30 to 100 mol%, limits inclusive, of macromolecular chains satisfying the following formula (I), $R_3\text{-}(X\text{-}R_2\text{-}Y)_n\text{-}X\text{-}A\text{-}R_1\text{-}A\text{-}X\text{-}(Y\text{-}R_2\text{-}X)_m\text{-}R_3$, and 0

to 70 mol%, limits inclusive, of macromolecular chains satisfying the following formula (II), R_4-[Y-R_2-X]$_p$-R_3.

The recited at least one polycondensate **consists of** macromolecular chains of formula (I) and optionally macromolecular chains of formula (II). By comparison, the star polyamide of *Myard et al* has a core that is bonded to at least three polyamide branches. See col. 3, lines 62-65. The core of the star polyamide of *Myard et al*, which is bonded to at least three polyamide branches, does not correspond to the macromolecular chains (I) or (II) or a part thereof. Thus, the "consists of" language recited in claim 29 excludes the star polyamide of *Myard et al* due to the presence of the core of the star structure.

Furthermore, Applicants note the Examiner's allegation at page 13 of the Official Action, that "Myard applies the same monomers, which [are] expected to produced the same polymeric structure." Applicants respectfully but strenuously traverse such assertion. *Myard et al* does not disclose the use of a difunctional compound which comprises at least one of adipic acid, decanoic or sebacic acid, dodecanoic acid, terephthalic acid, isophthalic acid, hexamethylenediamine, methylpentamethylenediamine, 4,4'-diaminodicyclohexylmethane, butanediamine, metaxylylenediamine, 1,3-propanediol, 1,2- ethanediol, 1,4-butanediol, 1,5-pentanediol, 1,6-hexanediol or polytetrahydrofuran, as is presently claimed. *Myard et al* discloses that in the formula (IIa) compound having the structure X-R_2-Y, "Y is a primary amine functional group when X represents a carboxylic acid functional group or Y is a carboxylic acid functional group when X represents a primary amine functional group". See col. 4, lines 46-49. Such formula (IIa) compound of *Myard et al* does not correspond to any of the recited difunctional compounds. It is clear from such

deficiencies of *Myard et al* that such document does not disclose or suggest the claimed polycondensate.

For at least the above reasons, *Myard et al* does not disclose or suggest each feature recited in independent claim 29. Accordingly, withdrawal of the rejection under 35 U.S.C. §103(a) is respectfully requested.

Claims 29-52 and 57 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 3,893,981 (*Thoma et al*). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Thoma et al does not disclose or suggest each feature recited in independent claim 29. For example, *Thoma et al* does not disclose or suggest that the polycondensate is obtained by melt blending a polyamide obtained by polymerization of lactams and/or amino acids or a polyester obtained by polymerization of lactones and/or hydroxyacids, with a difunctional compound, wherein the difunctional compound comprises at least one of adipic acid, decanoic or sebacic acid, dodecanoic acid, terephthalic acid, isophthalic acid, hexamethylenediamine, methylpentamethylenediamine, 4,4'-diaminodicyclohexylmethane, butanediamine, metaxylylenediamine, 1,3-propanediol, 1,2- ethanediol, 1,4-butanediol, 1,5-pentanediol, 1,6-hexanediol or polytetrahydrofuran, as recited in claim 29.

The Examiner has alleged that *Thoma et al* "applies the same monomers" as those employed in claim 29. See Official Action at page 13. However, claim 29 recites the use of a difunctional compound which results in the formation of a polycondensate consisting of the macromolecular chains (I) and optionally macromolecular chains (II). By comparison, *Thoma et al* recites the use of a specific aliphatic triamine, and teaches that such aliphatic triamine is **essential** to producing the product disclosed therein. See col. 4, lines 26-29. While *Thoma et al* also discloses the use of certain difunctional

monomers, *Thoma et al* teaches that such difunctional monomers must be used in combination with the aliphatic triamine. The resulting structure of the *Thoma et al* polyamide formed from the aliphatic triamine is not the same as the claimed polycondensate. This can clearly be seen by comparing the structures shown at column 4 of *Thoma et al* with the claimed macromolecular chains.

For at least the above reasons, it is apparent that independent claim 29 is non-obvious over *Thoma et al*. Accordingly, withdrawal of the rejection under 35 U.S.C. §103(a) is respectfully requested.

Claims 29-35, 37, 39-41 and 43-52 stand rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-23 of U.S. Patent No. 7,323,241. For the reasons previously explained herein with respect to the §103(a) rejection on the basis of the disclosure of *Myard et al*, of which claims 1-23 of *Myard et al* are a part thereof, independent claim 29 is patentably distinguishable over the disclosure of *Myard et al*, and is distinguishable over the claims thereof for at least the same reasons previously noted herein. Accordingly, for at least the above reasons, reconsideration and withdrawal of the rejection is respectfully requested.

Claims 29-52 stand provisionally rejected on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 22-42 of copending Application No. 10/565,870 on the grounds set forth on page 12 of the Official Action. As noted in Applicants' previous response, this rejection is moot in view of the previous amendment to claim 29, wherein such claim recites that the polycondensate is obtained by melt blending a polyamide obtained by polymerization of lactams and/or amino acids or a polyester obtained by polymerization of lactones and/or hydroxyacids, with a difunctional compound, wherein the difunctional compound comprises at least one of adipic acid, decanoic or sebacic acid, dodecanoic acid,

terephthalic acid, isophthalic acid, hexamethylenediamine, methylpentamethylenediamine, 4,4'-diaminodicyclohexylmethane, butanediamine, metaxylylenediamine, 1,3-propanediol, 1,2- ethanediol, 1,4-butanediol, 1,5-pentanediol, 1,6-hexanediol or polytetrahydrofuran. The Official Action does not address Applicants' previously submitted comments noting that the present rejection is moot. For at least the above reasons, withdrawal of the rejection is respectfully requested.

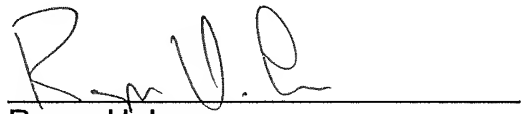
The dependent claims are allowable at least by virtue of their direct or indirect dependence from independent claim 29. Thus, a detailed discussion of the additional distinguishing features recited in the dependent claims is not set forth at this time.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.20(d) and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: December 9, 2011 By: 

Roger H. Lee
Registration No. 46317

Customer No. 21839
703 836 6620